

|   | Type | L # | Hits | Search Text           | DBs  | Time Stamp           |
|---|------|-----|------|-----------------------|--|----------------------|
| 1 | BRS  | L1  | 14   | rost near timothy.in. | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 12:34 |
| 2 | BRS  | L2  | 52   | burke near edmund.in. | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 12:35 |
| 3 | BRS  | L3  | 374  | 438/250.ccls.         | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 12:35 |

|   | Type | L # | Hits | Search Text   | DBs  | Time Stamp           |
|---|------|-----|------|---|--|----------------------|
| 4 | BRS  | L4  | 348  | 3 and capacitor   | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 12:49 |
| 5 | BRS  | L5  | 644  | (capacitor) near25<br>(etch near stop)                        | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 12:50 |
| 6 | BRS  | L6  | 44   | (capacitor) near25<br>(etch near stop)<br>near15 (protect\$3) | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 13:02 |

|   | Type | L # | Hits | Search Text   | DBs  | Time Stamp           |
|---|------|-----|------|---|--|----------------------|
| 7 | BRS  | L7  | 92   | (capacitor) near25<br>(etch) near15<br>(interconnect\$1)  | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 13:03 |
| 8 | BRS  | L8  | 247  | (capacitor) near25<br>(etch\$3) near15<br>(interconnect\$1)                                       | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:47 |
| 9 | BRS  | L9  | 0    | (capacitor) near25<br>((protective near<br>layer) near5 (etch\$3))<br>near15<br>(interconnect\$1) | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:28 |

|    | Type | L # | Hits | Search Text   | DBs  | Time Stamp           |
|----|------|-----|------|---|--|----------------------|
| 10 | BRS  | L10 | 0    | (capacitor) near25<br>((protective near<br>layer) near5 (etch\$3))<br>near15 (inter-<br>connect\$1) | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:28 |
| 11 | BRS  | L11 | 0    | (capacitor) near25<br>((protect near layer)<br>near5 (etch\$3)) near15<br>(inter-connect\$1)        | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:28 |
| 12 | BRS  | L12 | 0    | (capacitor) near25<br>((protect near layer)<br>near5 (etch\$3)) near15<br>(interconnect\$1)         | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:39 |

|    | Type | L # | Hits | Search Text   | DBs  | Time Stamp           |
|----|------|-----|------|---|--|----------------------|
| 13 | BRS  | L13 | 1    | (capacitor) near25<br>((protect) near5<br>(etch\$3)) near15<br>(interconnect\$1)  | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:29 |
| 14 | BRS  | L14 | 0    | (capacitor) near25<br>((protect) near5<br>(etch\$3)) near15<br>(inter-connect\$1) | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:29 |
| 15 | BRS  | L15 | 115  | (capacitor) near25<br>((protect) near5<br>(etch\$3))                              | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:31 |

|    | Type | L # | Hits | Search Text  | DBs  | Time Stamp           |
|----|------|-----|------|--|--|----------------------|
| 16 | BRS  | L16 | 13   | (capacitor) near25<br>((protect near layer)<br>near5 (etch\$3))        | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:29 |
| 17 | BRS  | L17 | 10   | (capacitor) near25<br>((protect) near5<br>(etch\$3)) near15<br>(metal) | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:33 |
| 18 | BRS  | L18 | 1247 | (capacitor) near25<br>(etch\$3) same<br>(protect\$3)                   | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:34 |

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|----|------|-----|------|--|--|----------------------|
| 19 | BRS  | L19 | 19   | ((capacitor) near25<br>(etch\$3) near15<br>(interconnect\$1)) same<br>(protect\$3) | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:34 |
| 20 | BRS  | L20 | 1075 | ((protect near layer)<br>near5 (etch\$3))  | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:40 |
| 21 | BRS  | L21 | 48   | ((protect near layer)<br>near5 (etch\$3)) same<br>(capacitor)                      | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:40 |

|    | Type | L # | Hits | Search Text  | DBs  | Time Stamp           |
|----|------|-----|------|--|--|----------------------|
| 22 | BRS  | L22 | 0    | (capacitor) near25<br>(etch\$3) near15<br>(inter-connect\$1) | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:47 |
| 23 | BRS  | L23 | 247  | (capacitor) near25<br>(etch\$3) near15<br>(interconnect\$1)  | US-<br>PGPUB<br>;<br>USPAT<br>;<br>EPO;<br>JPO;<br>DERWE<br>NT;<br>IBM_T<br>DB | 2005/01/1<br>8 14:47 |



|   | U | 1 | Document ID             | Title  | Current OR |
|---|---|---|-------------------------|--|------------|
| 1 |   |   | US<br>20040087098<br>A1 | MIM AND METAL RESISTOR<br>FORMATION AT CU BEOL<br>USING ONLY ONE EXTRA<br>MASK                             | 438/381    |
| 2 |   |   | US 6730573<br>B1        | MIM and metal resistor<br>formation at CU beol<br>using only one extra<br>mask                             | 438/381    |
| 3 |   |   | US 6486530<br>B1        | Integration of anodized<br>metal capacitors and<br>high temperature<br>deposition capacitors               | 257/532    |
| 4 |   |   | US 6284590<br>B1        | Method to eliminate top<br>metal corner shaping<br>during bottom metal<br>patterning for MIM<br>capacitors | 438/240    |
| 5 |   |   | US 6239010<br>B1        | Method for manually<br>manufacturing capacitor   | 438/592    |

|    | U | 1 | Document ID  | Title  | Current OR |
|----|---|---|--------------|--|------------|
| 6  |   |   | US 4466177 A | Storage capacitor optimization for one device FET dynamic RAM cell   | 438/251    |
| 7  |   |   | US 6430028 B | Metal-insulator-metal capacitor for use in semiconductor chips comprises spacer that protects dielectric layer from being etched   |            |
| 8  | X |   | US 6284590 B | Fabrication of metal-insulator-metal capacitor used in radio frequency mixed signal applications involves anisotropically etching away flowable material layer as sidewall spacer of top metal electrode |            |
| 9  | X |   | US 6200905 B | Formation of sidewall capacitors while forming metal oxide semiconductor transistor gates involves etching away conductive sidewall spacers while protecting top plate with protective mask              |            |
| 10 | X |   | US 5924011 A | Fabrication of low resistance silicide for an analog/digital device  |            |